Maryland Smart Energy Communities

Using Bonds to Finance Energy Projects

March 19, 2014 –10:00-11:30

Hosted by the University of Maryland Environmental Finance Center, the Maryland Energy Administration, and the Maryland Clean Energy Center

Maryland Energy
ADMINISTRATION
Powering Maryland's Future

Background

- MD Smart Energy Community Program
  - MSEC grants kick start ambitious energy goals, but where to find additional funding?
- Download fact sheet, contact information, and meeting agenda here: https://www.dropbox.com/s/0m18cahvgfoab3n/Bond_Financing_Webinar_Agenda%26Fact_Sheet.pdf

Agenda

- **Introduction and Purpose**, Sean Williamson (EFC), ~10 mins
- **Qualified Energy Conservation Bonds**, Elizabeth Bellis (Energy Program Consortium), ~20 mins
- **Case Study: Montgomery County QECB**, Joseph Beach (Director of Finance, Montgomery County), ~20 mins
- **MCAP Bond Financing**, Terry Daly (MD Clean Energy Center), ~20 mins
- **Q&A Discussion**, Group
- *Adjourn at 11:30*

National View of QECBs

Elizabeth Bellis, Energy Programs Consortium

Maryland Energy Administration

March 19, 2014

Circular 230: This presentation was not intended or written to be used, and it cannot be used by any taxpayer, for the purpose of avoiding penalties that may be imposed on the taxpayer under U.S. Federal tax law.

This presentation is intended to serve as a general introduction to the use of qualified energy conservation bonds. Nothing contained in this presentation should be construed or relied upon as legal advice.

Disclaimers

- QECBs are effectively a federal interest rate buydown program for state and local bonds.
- Interest on QECBs is taxable.
- Each state received a right to issue up to a certain quantity of QECBs. This right to issue is called an "allocation".
- In turn, the QECB legislation provided that states shall sub-allocate to "large local governments" representing populations of 100,000 or more based on Census Data. (Tribes also). Like an "allocation", each "sub-allocation" represents a right to issue QECBs.

QECB 101

- Issuer elects: Cash payments to the issuer OR tax credits to the bondholder.
  - Cash payments = 100% of the interest OR, if lower, 70% of the "qualified tax credit rate" set periodically and available at Treasury Direct's website.
  - Subsidy payments on QECBs are subject to a 7.2% reduction due to the sequester. This figure is in effect through 2024 unless intervening action occurs.*
- Maturities are also set periodically and have ranged from 12 to 25 years (see Treasury Direct website)

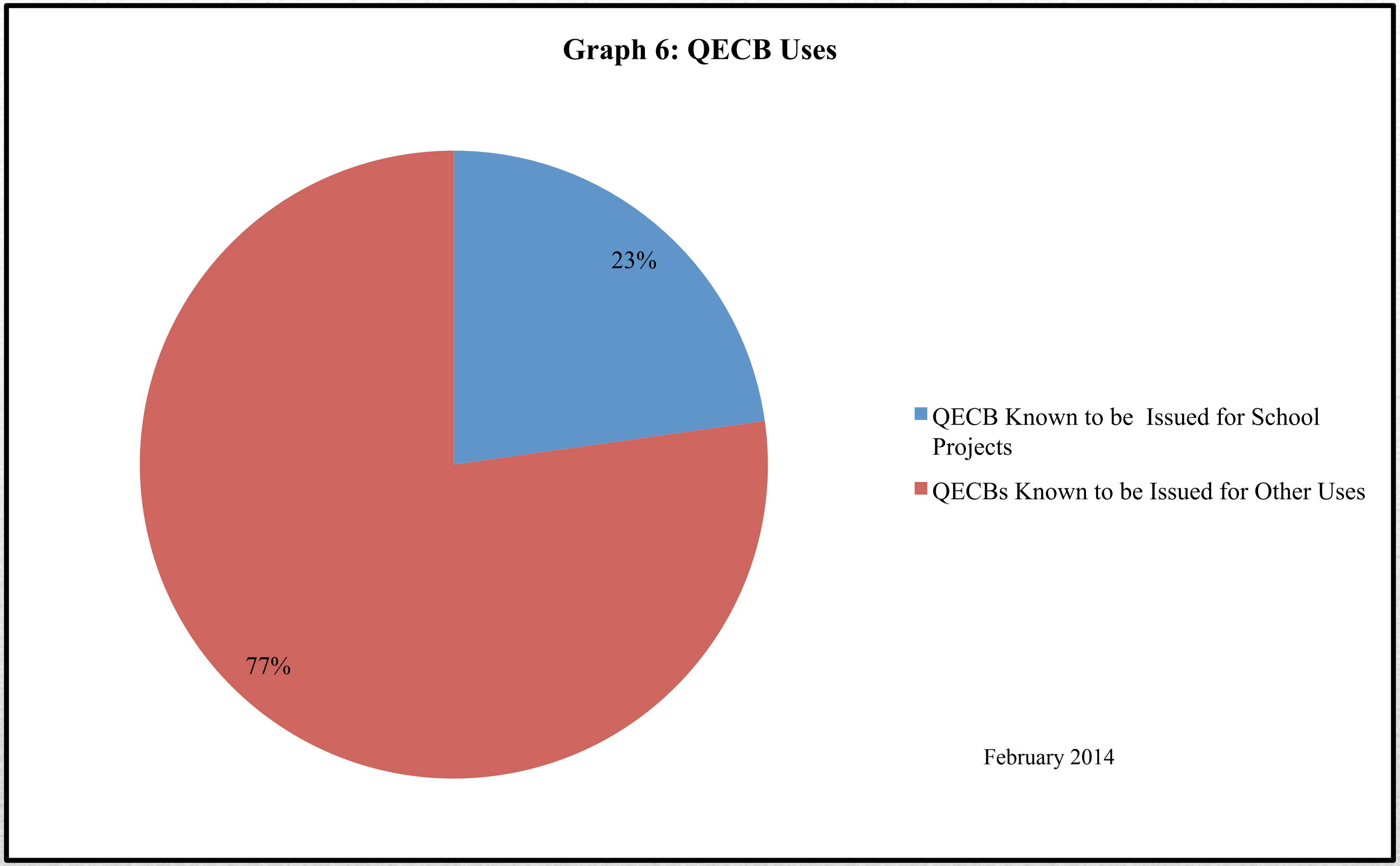
QECB Subsidy

*** See http://www.irs.gov/Tax-Exempt-Bonds/Update-Effect-of-Sequestration-on-Certain-State-&-Local-Government-Filers-of-Form-8038-CP, Bipartisan Budget Act of 2013, and S. 25, An Act to ensure that the reduced annual cost-of-living adjustment to the retired pay of members and former members of the Armed Forces under the age of 62 required by the Bipartisan Budget Act of 2013 will not apply to members or former members.**

A jurisdiction with a QECB allocation or sub-allocation may issue QECBs for one of a number of “qualified conservation purposes” (generally through capital investments).

- Reduction of energy consumption in publicly owned buildings by at least 20%
- Implementing green community programs (PACE financing, LED streetlights, etc.)
- Rural Development
- Renewable energy facilities (wind, solar, biomass, geothermal, landfill gas, trash to energy, hydropower facilities)
- Certain mass commuting projects

QECB Uses


Graph 6: QECB Uses
23%
77%
QECB Known to be Issued for School Projects
QECBs Known to be Issued for Other Uses
February 2014

QECBs by Use

- Nationally, up to 68% of the original $3.2b may be available.
- **MD Sub-Allocations:**
  - Anne Arundel County - $5,324,796
  - Baltimore County - $8,188,030
  - Carroll County - $1,761,908
  - Charles County - $1,463,345
  - Frederick County - $2,340,341
  - Harford County - $2,499,895
  - Howard County - $2,850,689
  - Montgomery County - $9,793,890
  - Prince George's County - $8,662,178
  - St. Mary's County - $1,044,425
  - Washington County - $1,508,357
  - Baltimore City - $6,659,180
  - Balance to State - $6,347,968
  - **Total: $58,445,000**
- **MD Issuances** (Total Known = $10,665,000)
- 7/27/2011 - $6.5m - public school improvements 10/3/2013 - $4.165m - Montgomery Cty equipment lease (qualified conservation projects)
- **Remaining MD:** $47,780,000

How much is left?

- Colorado pulled allocations back from large local governments that did not use them by a certain date, then had an open application process for portions of the state allocation in successive rounds.
- New York requested that large local governments that received allocations submit issuance plans or affirmatively waive their allocations back to the state by July 2010.
- Tennessee asked large local governments in 2012 to indicate whether they planned to issue their full allocations. The state followed up in 2013, giving larger local government the opportunity to waive them back to a state pool that is open for proposals. The window to file applications to the state closed in January 2014, with the total volume of proposals falling $25 million short of the remaining state allocation.

State Aggregation Examples

Large Solar Project

- Issuer: **Los Angeles Department of Water & Power**
- QECB Amount Issued: $131 million
- Use of Bond Proceeds:
  - Pine Tree Wind Turbine Expansion Project – 10 wind turbines (15MW total added)
  - Pine Tree Solar Project – PV generator targeted at 10MW at 34.5kV output); will generate 20 GWh per year
  - Adelanto Solar Project – PV generator targeted at 10MW at 4.16kV output; will generate 20 GWh per year

QECB Project Example

Medium-Sized Multifamily Housing Issuance

- Issuer: **Colorado Housing Finance Authority**
- Non-profit partner: Community Housing Concepts, Inc.
- QECB Amount Issued: $6.8 million
- Use of Bond Proceeds:
  - Preserved the affordability of a 100-unit seniors housing development after the addition of solar panels, energy efficient windows, appliances, and other energy efficient renovations
  - Also used the Tax Credit Assistance Program (TCAP), a federal housing grant program administered by the Department of Housing and Urban Development, which assists Low Income Housing Tax Credit (LIHTC) projects funded during 2007, 2008 and 2009, to help with program costs

QECB Project Example

<u>Small Energy Efficiency Issuance for County Gov't Buildings</u>

- Issuer: **Columbus-Licking County, Ohio**
- QECB Amount Issued: $2.1M
- Use of Bond Proceeds:
  - Retrofitted 12 county government buildings
  - Used QECB funds and Air Quality Development Bonds to fund the project
  - Upgrades included: lighting retrofits, water conservation, insulation improvements, HVAC, roof and window replacements, and building controls systems upgrades
  - Expected to deliver $72, 465 in annual utility reductions and decrease greenhouse gas production by 714 tons of CO_2 annually

QECB Project Example

- The current version of the EPC QECB paper is available at http://www.energyprograms.org/wp-content/uploads/2013/12/QECB_memo_12-13-13.pdf. Updates will be posted periodically on our Publications page.
- The NASEO website has a variety of resources, including documents other states have used and the EPC QECB memo which contains information about all known issuances.
  - http://www.naseo.org/resources/financing/qecb/index.html
- DSIRE has a QECB page with links to relevant statutory provisions and IRS guidance.
  - http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US51F&re=1&ee=1
- The Department of Energy's website has resources including a QECB Primer and webinars.
  - http://www1.eere.energy.gov/wip/solutioncenter/financialproducts/m/qecb.html

Where can I find more information?

- U.S. DOE accepts applications from state and local officials for *targeted* one-on-one technical assistance
- Applications can also be submitted online at DOE's *State & Local Solution Center*: www.eere.energy.gov/wip/solutioncenter/technical_assistance.html
- Applications are reviewed and evaluated to determine the *level of effort* based on:
  - Near-term and long-term impacts
  - Replicability for other jurisdictions
- Examples include:
  - Technical assistance over the phone to discuss recipient's QECB questions with e-mail follow-up providing resources and references
  - In-depth research about a specific question or issue
  - Webinar and/or PowerPoint presentation

How EPC can help

Elizabeth Bellis
Counsel and Director, QECB & WHEEL Programs, EPC
Email: ebellis@energyprograms.org

Questions?
Please keep in touch.

Using Bonds to Finance Energy Projects
Maryland Energy Administration

Montgomery County QECB Case Study: Overview & Lessons Learned

Webinar, March 19, 2014

Joseph F. Beach
Director of Finance
Montgomery County Government
Rockville, Maryland
www.montgomerycountymd.gov/finance

Montgomery County QECB Case Study

- Project Background
  - County HHS Headquarters, Rockville
  - $4.165 Million in Improvements including:
    - Lighting system improvements
    - Water fixture upgrades
    - Building envelope improvements
    - Chiller plant upgrades
    - Transformer upgrades
    - Conversion to natural gas
    - Generator stack and exhaust fans

Montgomery County QECB Case Study

- Project Team:
  - Contractor: Johnson Controls
  - Financial Advisor: PFM
  - Financing: Banc of America
  - Bond & Tax Counsel: McKennon, Shelton, Henn

Montgomery County QECB Case Study

- Process
  - Department of General Services selected project location based on immediate need and potential for substantial energy savings
  - Request for Bids issued 9/9/13 for financing partner & sent to over 20 banks
  - 3 bids received
  - Banc of America selected

Montgomery County QECB Case Study

- Financing Terms/Details
  - Par: $4,165,000
  - Cost of Issuance: $73,049
  - TIC: 5.17%
  - TIC after QECB Allocation: 1.45%
  - Closing: October 7, 2013
  - Term: 20 years
  - Structured as an Equipment Lease Purchase
  - Direct Subsidy Payment Option

Montgomery County QECB Case Study

- Lessons Learned:
  - Payback period was very long and affected bank interest and flexibility. Could have been addressed with earlier involvement with operating department on selecting project and reviewing specific project improvements (e.g. Chiller and Boiler upgrades) that affected overall cost and project payback period.
  - Council Authorization: Required to be self supporting so it was not subject to local spending affordability restrictions (avoid competition with School construction and other capital projects using GO capacity). Could have accomplished with more flexibility without complications with aligning payback timeline with debt service schedule (e.g. self supporting over the life of the project rather than with each year)
  - More specific terms in Financing RFB to avoid extended negotiation over terms in financing document.

Montgomery County QECB Case Study

- Recommend:
  - Involve Financial Advisor and Counsel early in the project development to ensure that the project is eligible for QECBs.
  - Operating Departments: Make sure communication on project details with the Operating Department is clear and specific esp. in regard to
    - Communication with contractor
    - Status of financing (e.g. cost of improvements and amount of energy savings)
    - Quantity of energy savings achieved satisfies QECB requirements
  - Assume that the federal government QECB subsidy will be reduced by the sequester cuts and build this into your payback schedule.
  - Have realistic expectations: the economic value of the energy savings may not be as great as originally expected so the limited QECB allocation may be critical for a reasonable pay back period and a self supporting project.
  - Determine length of period for guaranteed savings. This can provide an added level of assurance and manages execution risk, but does come with a cost for additional measurement and verification.

FINANCING ENERGY EFFICIENCY AND RENEWABLE PROJECTS WITH MCAP

Presented By:

Terry Daly

Director of Project Finance

Brought to you by

ABOUT MARYLAND CLEAN ENERGY CENTER

MCEC was created in 2008 by the Maryland General Assembly as an instrumentality of the State of Maryland with the mission to promote clean energy, economic development, energy innovation and jobs in the State.

MCEC is enabled to issue bonds to complete economically viable renewable energy and energy efficiency projects that may not otherwise be implemented.

MARYLAND CLEAN ENERGY CAPITAL

ADVANTAGES OF FINANCING WITH MCEC'S MCAP PROGRAM

- Ability to implement energy efficiency and renewable projects without using cash-on-hand.
- Clients will save energy and produce a smaller carbon footprint.
- Projects owned by MCEC are not subject to tax in the State of Maryland.
- Because MCEC is the borrower, the indebtedness will not count against the Client's borrowing limitation or debt capacity.
- The typical transaction will be 'self-funding' in that savings repay the obligations to MCEC.
- Energy efficiency measures reduce electric power demand, thus taking pressure off the power grid and reducing the need to build more power plants.

MARYLAND CLEAN ENERGY CAPITAL

TYPICAL MCAP PROJECT

1. MCEC enters into two separate contracts: a Performance Contract with the ESCO and a Shared Energy Savings Agreement with the Client. Each contract outlines the scope of work and the dollar amount of the savings.
2. MCEC obtains funding for projects through the sale of tax-exempt bonds to private investors.
3. After closing, funds are held in an escrow account and released in draws as the work is satisfactorily completed.
4. ESCO guaranties the savings and is responsible for any *short-fall*.
5. Client keeps any savings in excess of bond payment.

THE PERFORMANCE CONTRACT

- **Energy Service Company** (ESCOs) performs an energy audit on Client's properties and suggest **energy conservation measures** (ECMs).
- **MCEC** enters into a Performance Contract (PC) with ESCO to install ECMs.
- **ECMs** must generate enough cash flow from energy savings to repay bond.
- **ESCO** implements the ECMs and provides Measurement & Verification and other services required in the Contract.
- **ESCO** guarantees that annual savings realized by the Client will meet or exceed the annual debt service payments or ESCO pays the short-fall.

MARYLAND CLEAN ENERGY CAPITAL

THE SHARED ENERGY SAVINGS AGREEMENT

- Client enters contract (SESA) with MCEC to implement the agreed upon ECMs based on the ESCOs audit.
- The SESA mirrors the Performance Contract MCEC has with the ESCO
- Energy savings are based on actual Measurement & Verification results.
- Client has no payment obligation if energy savings are not achieved.
- Client retains savings in excess of bond payment.

MARYLAND CLEAN ENERGY CAPITAL

HOW IS THIS TRANSACTION "OFF-BALANCE SHEET, OFF-CREDIT"

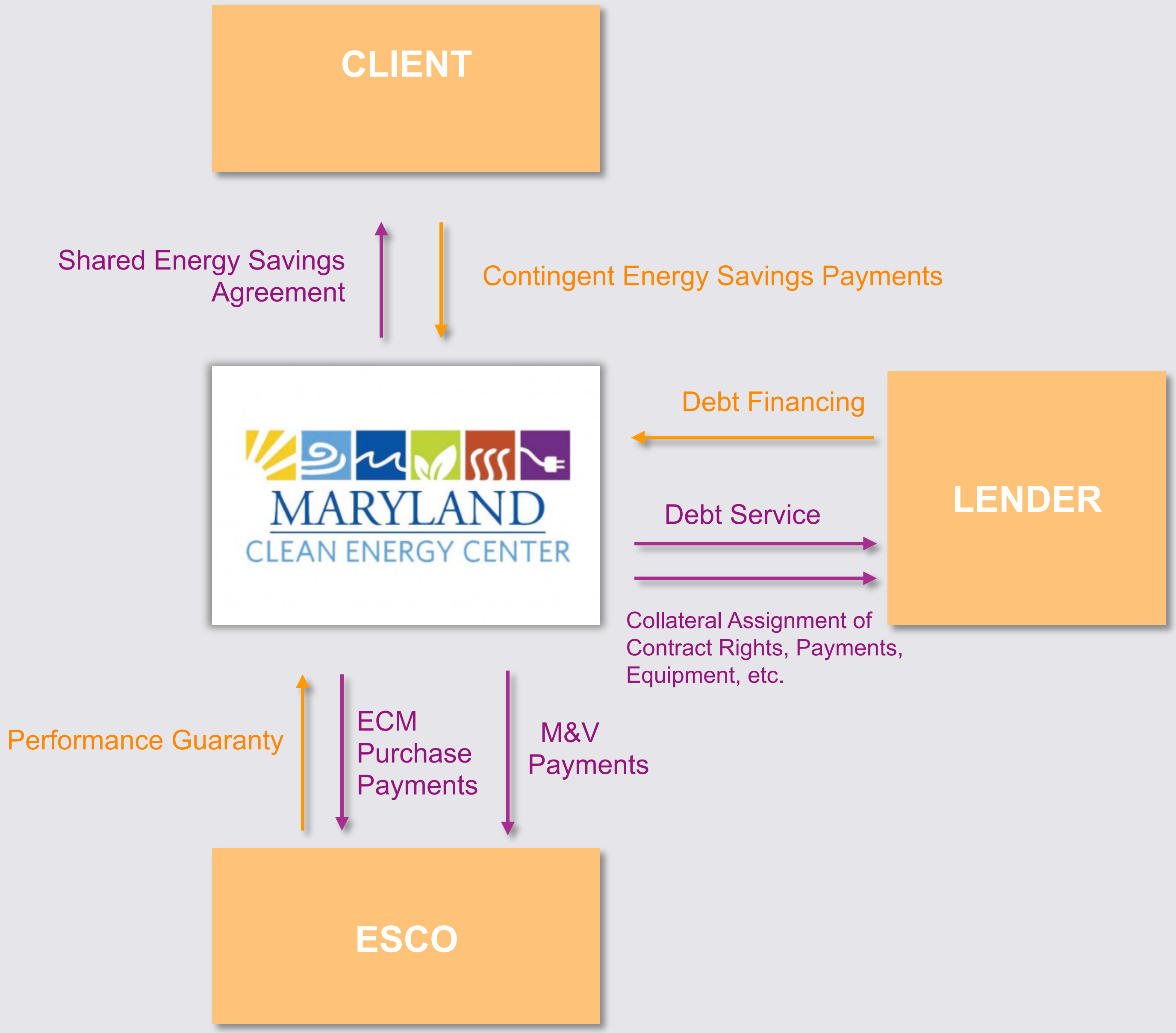
- MCEC's bond financing is structured as a services agreement and not as a lease or other debt obligation.

- The client's obligation to pay is contingent upon realizing energy savings. If no savings are realized, then there is no payment obligation. Thus, the client's obligations under the agreement may be treated as an annual operating expense and not as a long-term capital obligation.

- Credit rating agencies typically view such obligations as "credit-positive" as they do not add to the client's long-term debt obligations and reduce the client's annual operating expenses.

- Because MCEC "owns" the Energy Conservation Measures, these assets are considered off-balance sheet for the client.

SHARED ENERGY SAVINGS AGREEMENT TRANSACTION STRUCTURE



FREQUENTLY ASKED QUESTIONS

Who can participate in MCAP?

- Any government or non-profit project in the state of Maryland.

What kinds of projects can receive this type of program support?

- There are a wide variety of projects including retrofitting of HVAC equipment, lighting, boilers, windows, water conservation, CHP and renewable energy projects.

Is there a limit on the size of the project?

- Typically MCEC will be an attractive finance solution for projects above $2 million. No bond size is too large for MCAP other than the bond market's appetite for the transaction.

MARYLAND CLEAN ENERGY CAPITAL

FAQS CONTINUED

How much funding is available through the program?

- There is no practical limit on the availability of funding for credit-worthy projects. Bond funding is generated through a competitive bidding process with qualified investors.

What is a typical rate and term for the bonds?

- MCAP sources capital through a competitive bid process ensuring an attractive cost of capital to the end-user. Because projects are unique, the variables of each project including the scope of work, amount of financing and participants will impact the pricing.

Does my organization have to be rated by a bond rating agency to use MCAP?

- No. MCEC works with its financing team to find investors that underwrite qualified projects.

MARYLAND CLEAN ENERGY CAPITAL

MARYLAND CLEAN ENERGY CAPITAL

providing financial solutions

CONTACT

Terry Daly

MCEC Director of Project Finance

410-251-1666

terryd@mdcleanenergy.org

CONTACT INFORMATION

Qualified Energy Conservation Bonds	MCAP Bond Financing
Dan Bresette, MEA T: 410-260-7940 E: Daniel.bresette@maryland.gov Elizabeth Bellis, EPC T: 917-370-7916 E: ebellis@energyprograms.org	Terry Daly, MCEC T: 410-251-1666 E: terryd@mdcleanenergy.org Ted Atwood, Baltimore City Energy Office (For Baltimore City Case Study) T: 410-396-3704 E: Theodore.Atwood@baltimorecity.gov